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Patent  
Our Case No. 2003 P 09373 US

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: )  
Thomas )  
                        ) Examiner: Not Yet Assigned  
Serial No.: Not Yet Assigned )  
                        ) Group Art Unit: Not Yet Assigned  
Filed: Herewith )  
                        )  
For: Method and System for Displaying )  
and/or Manipulating Medical )  
Image Data )

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to the obligation under 37 C.F.R. § 1.56 and in conformance with 37 C.F.R. §§ 1.97-1.99, Applicant hereby submit documents A1-A15 listed on the attached form PTO-1449 for consideration by the Examiner. Copies of these documents are enclosed herewith. Applicant requests that the Examiner review the entire disclosure of these documents and make them of record.

Applicant additionally wishes to bring U.S. Patent Application Serial Nos. 08/978,726 and 09/157,118 to the Examiner's attention. These applications, which are now abandoned, are owned by the assignee of the present application. The Examiner is asked to review the Office Actions and the other papers in those applications, as the Examiner may find the subject matter

of those application to be in the same general field as the subject matter of the present application.

Finally, Applicant wishes to note that Digital Imaging and Communications in Medicine (DICOM) is a medical image standard for communication of biomedical diagnostic and therapeutic information in disciplines that use digital images and associated data. By using a medical image standard such as DICOM, medical image data can be shared and used among compliant devices, such as imaging systems and workstations. A typical use of DICOM is with two-dimensional (“2D”) ultrasound images that are archived as a simple sequence of video images. Because the image data is typically processed, post-scan converted data, once 2D ultrasound images are stored, none of the post-processing capabilities normally available on the ultrasound system (such as gray-scale maps, edge enhancement, and video filters) are available to enhance the 2D image. This provides the benefit of ensuring that the archived image reproduces as closely as possible what the clinician who stored the image was viewing at the time the image was archived.

Recent advances have generated a desire to store and later manipulate other forms of image data. For example, in the emerging field of real-time three-dimensional (“3D”) imaging (sometimes referred to as 4D, or Live-3D), clinicians would like to be able to apply post-processing functions to archived images, such as extracting a 2D image from a three-dimensional data set (*i.e.*, multi-planer reconstruction (“MPR”)) and viewing a 3D image from different angles. In addition to these 3D-specific post-processing functions, clinicians would also like to apply conventional 2D functions, such as gray-scale remapping, edge enhancement, and speckle reduction, to 3D images.

Although DICOM-compliant image viewers are not capable of displaying and/or manipulating these other forms of image data, the “private attribute” field in DICOM can be used to transmit non-standard image data from one DICOM device to another. Many ultrasound system manufacturers have taken advantage of this field to transmit data that cannot be stored in the DICOM format from a DICOM-compliant ultrasound system to a DICOM-compliant workstation. The workstation may have proprietary software installed to enable the workstation to utilize this non-DICOM data, or the workstation may simply ignore the non-DICOM data.

The filing of this Information Disclosure Statement does not constitute an admission that the information cited herein is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b). Further, Applicant reserves the right to contest that any of the information submitted herewith is prior art against the present application.

Dated: September 19, 2003

Respectfully submitted,

  
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Attorney for Applicant

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FORM PTO-1449	SERIAL NO. Not Yet Assigned	CASE NO. 2003P09373US
<b>LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT</b>  (use several sheets if necessary)	FILING DATE Herewith	GROUP ART UNIT Not Yet Assigned
	APPLICANT(S): Thomas	

**REFERENCE DESIGNATION**                    **U.S. PATENT DOCUMENTS**

EXAMINER INITIAL	DOCUMENT NUMBER Number-Kind Code (if known)	DATE	NAME	CLASS/ SUBCLASS	FILING DATE
A1	6,347,398 B1	02/2002	Parthasarathy et al.		
A2	6,078,951	06/2000	Pashupathy et al.		
A3	6,049,671	04/2000	Slivka et al.		
A4	6,014,689	01/2000	Budge et al.		
A5	5,920,317	07/1999	McDonald		
A6	5,838,906	11/1998	Doyle et al.		
A7	5,790,977	08/1998	Ezekiel		
A8	5,715,823	02/1998	Wood et al.		
A9	5,603,323	02/1997	Plugrath et al.		
A10	5,513,101	04/1996	Pinsky et al.		
A11	5,452,416	09/1995	Hilton et al.		

**FOREIGN PATENT DOCUMENTS**

EXAMINER INITIAL	DOCUMENT NUMBER Number-Kind Code (if known)	DATE	COUNTRY	CLASS/ SUBCLASS	TRANSLATION YES OR NO

EXAMINER INITIAL	OTHER ART – NON PATENT LITERATURE DOCUMENTS (Include name of author, title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date page(s), volume-issue number(s), publisher, city and/or country where published.)	
	A12	"Philips prepares to launch system upgrade capable of true real-time 3D echo," Diagnostic Imaging Scan – The Global Biweekly of Medical Imaging, Vol. 16, No. 18, CMP Media LLC, 2 pages (9/11/02).
	A13	"LOGIQ 9," TruScan Imaging Technology, GE Medical Systems, 12 pages (2002).
	A14	"Driven by TruScan," <a href="http://www.gemedicalsystems.com">http://www.gemedicalsystems.com</a> , 3 pages (printed 8/2003).
	A15	"DICOM Cook Book for Implementations in Modalities," Chapters 1 and 2, Version 1.1, Philips Medical Systems, 57 pages (1/14/97).

EXAMINER	DATE CONSIDERED
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.